Appendix E – Final Rules

Part 1 of Title 47 of the Code of Federal Regulations, is revised to read as follows:

PART 1 – PRACTICE AND PROCEDURE

The authority citation for Part 1 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309, and 325(e) unless otherwise noted.

28. Section 1.924(f) is amended to read as follows:

§ 1.924 Quiet zones.

* * * * *

(f) GOES. The requirements of this paragraph are intended to minimize harmful interference to Geostationary Operational Environmental Satellite earth stations receiving in the band 1670-1675 MHz. which are located at Wallops Island, Virginia; Fairbanks, Alaska; and Greenbelt, Maryland.

(1) Applicants and licensees planning to construct and operate a new or modified station within the area bounded by a circle with a radius of 100 kilometers (62.1 miles) that is centered on 37° 56' 47" N, 75° 27' 37" W (Wallops Island) or 64° 58' 36" N, 147° 31' 03" W (Fairbanks) or within the area bounded by a circle with a radius of 65 kilometers (40.4 miles) that is centered on 39° 00' 02" N, 76° 50' 31" W (Greenbelt) must notify the National Oceanic and Atmospheric Administration (NOAA) of the proposed operation. For this purpose, NOAA maintains the GOES coordination web page at http://www.osd.noaa.gov/radio/frequency.htm, which provides the technical parameters of the earth stations and the point-of-contact for the notification. The notification shall include the following information: requested frequency, geographical coordinates of the antenna location, antenna height above mean sea level, antenna directivity, emission type, equivalent isotropically radiated power, antenna make and model, and transmitter make and model.

(2) Protection.

(a) Wallops Island and Fairbanks. Licensees are required to protect the Wallops Island and Fairbanks sites at all times.

(b) Greenbelt. Licensees are required to protect the Greenbelt site only when it is active. Licensees should coordinate appropriate procedures directly with NOAA for receiving notification of times when this site is active.

(3) When an application for authority to operate a station is filed with the FCC, the notification required in paragraph (f)(1) of this section should be sent at the same time. The application must state the date that notification in accordance with paragraph (f)(1) of this section was made. After receipt of such an application, the FCC will allow a period of 20 days for comments or objections in response to the notification.

(4) If an objection is received during the 20-day period from NOAA, the FCC will, after consideration of the record, take whatever action is deemed appropriate.

29. Section 1.1307 is amended to read as follows:

§ 1.1307 Actions that may have a significant environmental effect, for which Environmental Assignments (EAs) must be prepared.

* * * * *

(b) * * *

TABLE 1 - TRANSMITTERS, FACILITIES AND OPERATIONS SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

SERVICE (TITLE 47 CFR RULE PART)	EVALUATION REQUIRED IF:
*****	*****
Wireless Communications Service (Part 27)	(1) for the 1390-1392 MHz, 1392-1395 MHz, 1432-1435 MHz 1670-1675 MHz and 2385-2390 MHz bands: *Non-building-mounted antennas*: height above ground level to lowest point of antenna < 10 m *and* total power of all channels > 2000 W ERP (3280 W EIRP) *Building-mounted antennas*: total power of all channels > 2000 W ERP (3280 W EIRP) (2) for the 746-764 MHz, 776-794 MHz, 2305-2320 MHz, and 2345-2360 MHz bands Total power of all channels > 1000 W ERP (1640 W EIRP)
*****	*****

Part 2 of title 47 of the Code of Federal Regulations is revised to read as follows:

PART 2 – FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

The authority citation for Part 2 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

30. Section 2.106, the Table of Frequency Allocations, footnotes, US74, US350 and US362 are amended to read as follows:

§ 2.106 Table of Frequency Allocations.

* * * * *

UNITED STATES (US) FOOTNOTES

* * * * *

US74 In the bands 25.55-25.67, 73.0-74.6, 406.1-410.0, 608-614, 1400-1427, 1660.5-1670.0, 2690-2700 and 4990-5000 MHz and in the bands 10.68-10.7, 15.35-15.4, 23.6-24.0, 31.3-31.5, 86-92, 105-116 and 217-231 GHz, the radio astronomy service shall be protected from extraband radiation only to the extent that such radiation exceeds the level which would be present if the offending station were operating in compliance with the technical standards or criteria applicable to the service in which it operates. Radio astronomy observations in these bands are performed at the locations listed in US311.

* * * * *

US350 In the bands 608-614 MHz and 1395-1400 MHz the Government and non-Government land mobile service is limited to medical telemetry and medical telecommand operations. Availability and use of medical telemetry and telecommand and non-medical telemetry and telecommand in the band 1427-1432 MHz are described below:

Location (see §§ 90.259(b)(4) and 95.630(b) of this chapter for a detailed description)	1427-1429 MHz 1431.5-1432 MHz	1429-1431.5 MHz
Austin/Georgetown, Texas	Non-Government land mobile service is limited to telemetry and telecommand operations.	Government and non-Government land mobile service is limited to medical telemetry and telecommand operations. Non-Government telemetry and telecommand use is permitted on a secondary basis.
Battle Creek, Michigan		
Detroit, Michigan		
Pittsburgh, Pennsylvania		
Richmond/Norfolk, Virginia		
Spokane, Washington		
Washington, DC metropolitan area		

Location	1427-1429.5 MHz	1429.5-1432 MHz
Rest of U.S.	Government and non-Government land mobile service is limited to medical telemetry and telecommand operations. Non-Government telemetry and telecommand use is permitted on a secondary basis.	Non-Government land mobile service is limited to telemetry and telecommand operations.

* * * * *

US362 The band 1670-1675 MHz is allocated to the meteorological-satellite service (space-to-Earth) on a primary basis for Government use. Earth station use of this allocation is limited to Wallops Island, VA (37° 56' 47" N, 75° 27' 37" W), Fairbanks, AK (64° 58' 36" N, 147° 31' 03" W), and Greenbelt, MD (39° 00' 02" N, 76° 50' 31" W). Applicants for non-Government stations within 100 kilometers of the Wallops Island or Fairbanks coordinates and within 65 kilometers of the Greenbelt coordinates shall notify NOAA in accordance with the procedures specified in 47 C.F.R. § 1.924.

31. Part 27 of title 47 of the Code of Federal Regulations is revised to read as follows:

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

The authority citation for Part 27 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 301, 302, 303, 307, 309, 332, 336, and 337, unless otherwise noted.

32. Section 27.1 is amended to read as follows:

§ 27.1 Basis and purpose.

* * * * *

(b) * * *

(4) 1390-1392 MHz.

(5) 1392-1395 MHz and 1432-1435 MHz.

(6) 1670-1675 MHz.

(7) 2385-2390 MHz.

33. Section 27.4 is amended to add the following definition:

§ 27.4 Terms and definitions.

* * * * *

Affiliate. This term shall have the same meaning as that for "affiliate" in part 1, § 1.2110(b)(5) of this chapter.

* * *

Band Manager. The term *Band Manager* refers to a licensee in the paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands that functions solely as a spectrum broker by subdividing its licensed spectrum and making it available to system operators or directly to end users for fixed or mobile communications consistent with Commission Rules. A *Band Manager* is directly responsible for any interference or misuse of its licensed frequency arising from its use by such non-licensed entities.

34. Section 27.5 is amended to read as follows:

§ 27.5 Frequencies

* * * * *

(d) *1390-1392 MHz band.* The 1390-1392 MHz band is available for assignment on a Major Economic Area basis.

(e) *The paired 1392-1395 and 1432-1435 MHz bands.* The paired 1392-1395 MHz and 1432-1435 MHz bands are available for assignment on an Economic Area Grouping basis as follows:

Block A: 1392-1393.5 MHz and 1432-1433.5 MHz; and
Block B: 1393.5-1395 MHz and 1433.5-1435 MHz.

(f) *1670-1675 MHz band.* The 1670-1675 MHz band is available for assignment on a nationwide basis.

(g) *2385-2390 MHz band.* The 2385-2390 MHz band is available for assignment on a nationwide basis.

35. Section 27.6 is amended to read as follows:

§ 27.6 Service areas.

* * * * *

(d) *1390-1392 MHz band.* Service areas for the 1390-1392 MHz band is based on Major Economic Areas (MEAs), as defined in paragraphs (a)(1) and (a)(2) of this section.

(e) *The paired 1392-1395 and 1432-1435 MHz bands.* Service areas for the paired 1392-1395 and 1432-1435 MHz bands are as follows. Service areas for Block A in the 1392-1393.5 MHz and 1432-1433.5 MHz bands and Block B in the 1393.5-1395 MHz and 1433.5-1435 MHz bands are based on Economic Area Groupings (EAGs) as defined in paragraph (b)(2).

(f) *1670-1675 MHz band.* Service areas for the 1670-1675 MHz band are available on a nationwide basis.

(g) *2385-2390 MHz band.* Service areas for the 2385-2390 MHz band are available on a nationwide basis.

36. Section 27.10 is revised to read as follows:

§ 27.10 Regulatory status.

Except with respect to Band Manager licenses and Guard Band Manager licenses, which are subject to subpart G of this part, the following rules apply concerning the regulatory status of licensees in the frequency bands specified in § 27.5.

* * * * *

37. Section 27.11 is revised to read as follows:

§ 27.11 Initial authorization.

* * * * *

(e) *1390-1392 MHz band.* Initial authorizations for the 1390-1392 MHz band shall be for 2 megahertz of spectrum in accordance with §27.5(c). Authorizations will be based on Major Economic Areas (MEAs), as specified in §27.6(c).

(f) *The paired 1392-1395 MHz and 1432-1435 MHz bands.* Initial authorizations for the paired 1392-1395 MHz and 1432-1435 MHz bands shall be for 3 megahertz of paired spectrum in accordance with §27.5(d). Authorization for Blocks A and B will be based on Economic Areas Groupings (EAGs), as specified in §27.6(d).

(g) *1670-1675 MHz band.* Initial authorizations for the 1670-1675 MHz band shall be for 5 megahertz of spectrum in accordance with §27.5(e). Authorizations will be on a nationwide basis.

(h) *2385-2390 MHz band.* Initial authorizations for the 2385-2390 MHz band shall be for 5 megahertz of spectrum in accordance with §27.5(f). Authorizations will be on a nationwide basis.

* * * * *

38. Section 27.12 is amended to read as follows:

§ 27.12 Eligibility.

(a) Except as provided in § 27.604, any entity other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. § 310, is eligible to hold a license under this part.

(b) Band Manager licenses. For the 1392-1395 MHz, 1670-1675 MHz, and 2385-2390 MHz bands and the paired 1392-1395 MHz and 1432-1435 MHz bands, applicants applying for an initial license may elect to operate as a Band Manager, subject to the rules governing Guard Band Managers under subpart G, *provided however*, that the following rules do not apply to Band Managers:

(1) The prohibition in Section 27.601(a) and (b) against employing a cellular system architecture;

(2) The requirement in Section 27.601(d)(1) to notify Public Safety frequency coordinators;

(3) The requirement in Section 27.603(c) to lease the predominant amount of its spectrum to non-affiliates;

(4) The prohibition in Section 27.604 against a single applicant becoming the winning bidder of both blocks A and B in a single geographic service area; and

(5) The requirement in Section 27.605 that any entity that acquires a portion of a Guard Band Manager's spectrum or geographic area through partitioning or disaggregation must also act as a band manager.

Section 27.13 is amended to read as follows:

§ 27.13 License period.

* * * * *

(c) *1390-1392 MHz band.* Initial authorizations for the 1390-1392 MHz band will have a term not to exceed ten years from the date of initial issuance or renewal.

(d) *The paired 1392-1395 and 1432-1435 MHz bands.* Initial WCS authorizations for the paired 1392-1395 MHz and 1432-1435 MHz bands will have a term not to exceed ten years from the date of initial issuance or renewal.

(e) *1670-1675 MHz band.* Initial authorizations for the 1670-1675 MHz band will have a term not to exceed ten years from the date of initial issuance or renewal.

(f) *2385-2390 MHz band.* Initial authorizations for the 2385-2390 MHz band will have a term not to exceed ten years from the date of initial issuance or renewal.

39. Section 27.50 is amended by adding new paragraphs (d), (e), and (f) to read as follows

and redesignating paragraphs (d) as paragraph (g) :

§ 27.50 Power and antenna height limits.

* * * * *

(d) The following power limits apply to the paired 1392-1395 MHz and 1432-1435 MHz bands as well as the unpaired 1390-1392 MHz band (1.4 GHz band):

(1) Fixed stations transmitting in the 1390-1392 MHz and 1432-1435 MHz bands are limited to 2000 watts EIRP peak power. Fixed stations transmitting in the 1392-1395 MHz band are limited to 100 watts EIRP peak power.

(2) Mobile stations transmitting in the 1390-1392 MHz and 1432-1435 MHz bands are limited to 4 watts EIRP peak power. Mobile stations transmitting in the1392-1395 MHz band are limited to 1 watt EIRP peak power.

(e) The following power limits apply to the 1670-1675 MHz band:

(1) Fixed and base stations are limited to 2000 watts EIRP peak power.

(2) Mobile stations are limited to 4 watts EIRP peak power.

(f) The following power limits apply to the 2385-2390 MHz band:

(1) Fixed and base stations are limited to 2000 watts EIRP peak power.

(2) Mobile and aeronautical mobile stations are limited to 4 watts EIRP peak power.

* * * * *

Section 27.53 is amended to read as follows:

§ 27.53 Emission limits.

* * * * *

(g) For operations in the unpaired 1390-1392 MHz band and the paired 1392-1395 MHz and 1432-1435 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB. Compliance with these provisions is based on the procedures described in paragraph (a)(4).

(h) For operations in the 1670-1675 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB. Compliance with these provisions is based on the procedures described in paragraph (a)(4).

(i) For operations in the 2385-2390 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB. Compliance with these provisions is based on the procedures described in paragraph (a)(4).

(j) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

40. Section 27.55(a) is amended to read as follows:

§ 27.55 Field strength limits.

(a) * * *

(3) The paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz band (1.4 GHz band): 47 dBuV/m.

We add a new Subpart to Part 27 as follows:

Subpart I – 1.4 GHz Band

§ 27.801 Scope.

This subpart sets out the regulations governing service in the paired 1392-1395 MHz and 1432-1435 MHz bands as well as the unpaired 1390-1392 MHz band (1.4 GHz band).

§ 27.802 Permissible communications.

Licensees in the paired 1392-1395 MHz and 1432-1435 MHz bands and unpaired 1390-1392 MHz band are authorized to provide fixed or mobile service, except aeronautical mobile service, subject to the technical requirements of this subpart.

§ 27.803 Coordination requirements.

(a) Licensees in the 1.4 GHz band will be issued geographic area licenses in accordance with the service areas listed in §27.6(d) and (e).

(b) Licensees in the 1.4 GHz Service must file a separate station application with the Commission and obtain an individual station license, prior to construction or operation, of any station:

(1) that requires submission of an Environmental Assessment under Part 1, § 1.1307;

(2) that requires international coordination;

(3) that operates in the quiet zones listed in Part 1, §1.924; or

(4) that requires approval of the Frequency Advisory Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC). Stations that require FAS approval are as follows:

(i) licensees in the 1390-1392 MHz and 1392-1395 MHz band must receive FAS approval prior to operation of fixed sites or mobile units within the NTIA recommended protection radii of the Government sites listed in footnote US351 of § 2.106.

(ii) licensees in the 1432-1435 MHz band must receive FAS approval, prior to operation of fixed sites or mobile units within the NTIA recommended protection radii of the Government sites listed in footnote US361 of § 2.106.

(c) Prior to construction of a station, a licensee in the 1.4 GHz Band must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by Part 17 of this chapter.

(d) It is the licensee's responsibility to determine whether an individual station needs referral to the Commission.

(e) The application required in subparagraph (b) must be filed on the Universal Licensing System.

§ 27.804 Field Strength Limits at WMTS Facility.

For any operation in the 1392-1395 MHz band, the predicted or measured field strength – into the WMTS band at 1395-1400 MHz – shall not exceed 150 uV/m at the location of any registered WMTS healthcare facility. When performing measurements to determine compliance with this provision, measurement instrumentation employing an average detector and a resolution bandwidth of 1 MHz may be used, provided it accurately represents the true interference potential of the equipment.

§ 27.805 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a 1.4 GHz band licensee's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a 1.4 GHz band licensee and is subject to the obligations and restrictions on the 1.4 GHz band license as set forth in this subpart.

§ 27.806 1.4 GHz Service licenses subject to competitive bidding.

Mutually exclusive initial applications for 1.4 GHz Band licenses in the paired 1392-1395 MHz and 1432-1435 MHz bands as well as the unpaired 1390-1392 MHz band are subject to competitive bidding. The general competitive bidding procedures set forth in Part 1, Subpart Q of this chapter will apply unless otherwise provided in this subpart.

§ 27.807 Designated entities.

(a) Eligibility for small business provisions for 1.4 GHz band licenses in the paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz band.

(1) A very small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $15 million for the preceding three years.

(2) A small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $40 million for the preceding three years.

(3) A consortium of very small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(1) of this section. A consortium of small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(2) of this section.

(4) For purposes of determining whether an entity meets any of the definitions set forth in paragraphs (a)(1), (a)(2), or (a)(3) of this section, the gross revenues of the entity, its controlling interests and affiliates shall be considered in the manner set forth in § 1.2110(b) and (c) of this chapter.

(b) Bidding credits. A winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter. A winning bidder that qualifies as a small business or a consortium of small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter.

We add a new Subpart to Part 27 as follows:

Subpart J - 1670-1675 MHz Band.

§ 27.901 Scope.

This subpart sets out the regulations governing service in the 1670-1675 MHz band (1670-1675 MHz band).

§ 27.902 Permissible communications.

Licensees in the 1670-1675 MHz band are authorized to provide fixed or mobile service, except aeronautical mobile service, subject to the technical requirements of this subpart.

§ 27.903 Coordination requirements.

(a) The Licensee in the 1670-1675 MHz band will be issued a geographic area license on a nationwide basis in accordance with §27.6(f).

(b) Licensees in the 1670-1675 MHz band must file a separate station application with the Commission and obtain an individual station license, prior to construction or operation, of any station:

(1) that requires submission of an Environmental Assessment under Part 1, § 1.1307;

(2) that requires international coordination;

(3) that operates in the quiet zones listed under Part 1, § 1.924.

(c) The application required in subparagraph (b) must be filed on the Universal Licensing System.

(d) Prior to construction of a station, a licensee must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by Part 17 of this chapter.

(e) It is the licensee's responsibility to determine whether an individual station requires referral to the Commission.

§ 27.904 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a 1670-1675 MHz band licensee's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a 1670-1675 MHz licensee and is subject to the obligations and restrictions on the 1670-1675 MHz license as set forth in this subpart.

§ 27.905 1670-1675 MHz Service licenses subject to competitive bidding.

Mutually exclusive initial applications for the 1670-1675 MHz Band license are subject to competitive bidding. The general competitive bidding procedures set forth in Part 1, Subpart Q of this chapter will apply unless otherwise provided in this subpart.

§ 27.906 Designated entities.

(a) Eligibility for small business provisions.

(1) A very small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $15 million for the preceding three years.

(2) A small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $40 million for the preceding three years.

(3) A consortium of very small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(1) of this section. A consortium of small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(2) of this section.

(4) For purposes of determining whether an entity meets any of the definitions set forth in paragraphs (a)(1), (a)(2), or (a)(3) of this section, the gross revenues of the entity, its controlling interests and affiliates shall be considered in the manner set forth in § 1.2110(b) and (c) of this chapter.

(b) Bidding credits. A winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter. A winning bidder that qualifies as a small business or a consortium of small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter.

We add a new Subpart to Part 27 as follows:

Subpart K - 2385-2390 MHz Band.

§ 27.1001 Scope.

This subpart sets out the regulations governing service in the 2385-2390 MHz band (2385-2390 MHz band).

§ 27.1002 Permissible communications.

Licensees in the 2385-2390 MHz band are authorized to provide fixed or mobile service, including aeronautical mobile, subject to the technical requirements of this subpart.

§ 27.1003 Coordination requirements.

(a) The Licensee in the 2385-2390 MHz band will be issued a geographic area license on a nationwide basis in accordance with §27.6(g).

(b) The Licensee in the 2385-2390 MHz Band must file a separate station application with the Commission and obtain an individual station license, prior to construction or operation, of any station:

(1) that requires submission of an Environmental Assessment under Part 1, § 1.1307;

(2) that requires international coordination;

(3) that operates in the quiet zones listed in Part 1, § 1.924;

(4) that requires approval of the Frequency Advisory Subcommittee (FAS) of the Interdepartment Radio Advisory Committee(IRAC). The Licensee in the 2385-2390 MHz Band must receive FAS approval prior to operation of fixed sites or mobile units within the NTIA recommended protection radii of the Government aeronautical telemetry sites listed in footnote US363 of § 2.106.

(c) The Licensee in the 2385-2390 MHz Band must file a separate station application with the Commission and obtain an individual station license prior to construction or operation of any station that would require approval of the Aeronautical Flight Test Radio Coordinating Council (AFTRCC). Any fixed sites or mobile units within the protection radii of the non-Government flight test operations listed in footnote US363 of § 2.106 will require AFTRCC approval. The Licensee in the 2385-2390 MHz Band must receive AFTRCC approval prior to filing an application and the application must contain a showing of AFTRCC approval.

(d) Prior to construction of a station, the 2385-2390 MHz licensee must register with the Commission any station antenna structure for which notification to the Federal Aviation Administration is required by Part 17 of this chapter.

(e) It is the licensee's responsibility to determine whether a referral to the Commission is needed for any individual station constructed.

(f) The application required in subparagraphs (b) and (c) must be filed on the Universal Licensing System.

§ 27.1004 Geographic partitioning and spectrum disaggregation.

An entity that acquires a portion of a 2385-2390 MHz licensee's geographic area or spectrum subject to a geographic partitioning or spectrum disaggregation agreement under § 27.15 must function as a 2385-2390 MHz licensee and is subject to the obligations and restrictions on the 2385-2390 MHz license as set forth in this subpart.

§ 27.1005 2385-2390 MHz Service licenses subject to competitive bidding.

Mutually exclusive initial applications for the 2385-2390 MHz Band license are subject to competitive bidding. The general competitive bidding procedures set forth in Part 1, Subpart Q of this chapter will apply unless otherwise provided in this subpart.

§ 27.1006 Designated entities.

(a) Eligibility for small business provisions.

(1) A very small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $15 million for the preceding three years.

(2) A small business is an entity that, together with its controlling interests and affiliates, has average annual gross revenues not exceeding $40 million for the preceding three years.

(3) A consortium of very small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(1) of this section. A consortium of small businesses is a conglomerate organization formed as a joint venture between or among mutually independent business firms, each of which individually satisfies the definition in paragraph (a)(2) of this section.

(4) For purposes of determining whether an entity meets any of the definitions set forth in paragraphs (a)(1), (a)(2), or (a)(3) of this section, the gross revenues of the entity, its controlling interests and affiliates shall be considered in the manner set forth in § 1.2110(b) and (c) of this chapter.

(b) Bidding credits. A winning bidder that qualifies as a very small business or a consortium of very small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(ii) of this chapter. A winning bidder that qualifies as a small business or a consortium of small businesses as defined in this section may use the bidding credit specified in § 1.2110(f)(2)(iii) of this chapter.

41. Part 87 of title 47 of the Code of Federal Regulations, is amended to read as follows:

PART 87 – AVIATION SERVICES

The authority citation for Part 87 continues to read as follows:

AUTHORITY: Sections 4, 303, 307(e), 309, and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, 307(e), 309, and 332.

42. Section 87.173 is amended to read as follows:

* * * * *

(b) Frequency table:

Frequency or frequency band	Subpart	Class of station	Remarks
*****	*****	*****	*****
2310-2390 MHz[1]	*****	*****	*****
*****	*****	*****	*****

[1] All operation in the 2385-2390 MHz portion of the 2310-2390 MHz band are secondary to WCS operations in accordance with subpart K of Part 27 except at the locations listed in footnote US363 of § 2.106. Operations at the locations listed in footnote US363 of § 2.106 will remain primary until January 1, 2007. After January 1, 2007, all operations in the 2385-2390 MHz portion of the 2310-2390 MHz band will be secondary to WCS operations in accordance with subpart K of Part 27.

43. Part 90 of title 47 of the Code of Federal Regulations, is amended to read as follows:

PART 90 – PRIVATE LAND MOBILE RADIO SERVICES

The authority citation for Part 90 continues to read as follows:

AUTHORITY: Sections 4(i), 11, 303(g), 303(r), and 302(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

44. Section 90.20 is amended to read as follows:

* * * * *

(c) * * *

(3) *Frequencies.*

PUBLIC SAFETY POOL FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator

Kilohertz			
*****	*****	*****	*****
Megahertz			
*****	*****	*****	*****
1427 to 1432	Base, mobile or operational fixed.	72.	
*****	*****	*****	*****

The 1432 to 1435 MHz band is removed from the Public Safety Pool frequency table.

45. Section 90.35 is amended to read as follows:

§ 90.35 Industrial/Business Pool.

* * * * *

(b) * * *

(3) *Frequencies.*

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator
Kilohertz			
*****	*****	*****	*****
Megahertz			
216 to 217.....	Base or mobile.	55.	
217 to 220.....	Base, mobile, or operational fixed.	55.	
*****	*****	*****	*****
1427 to 1432	Base, mobile or operational fixed.	55.	
*****	*****	*****	*****

The 1432 to 1435 MHz band is removed from the Industrial/Business Pool frequency table.

46. Section 90.175 is amended as follows:

§ 90.175 Frequency Coordinator Requirements.

Except for applications listed in paragraph (j) of this section, each application for a new frequency assignment, for a change in existing facilities as listed in § 90.135(a), or for operation at temporary locations in accordance with § 90.137 must include a showing of frequency coordination as set forth below.

(a) Frequency coordinators may request, and applicants are required to provide, all appropriate technical information, system requirements, and justification for requested station parameters when such information is necessary to identify and recommend the most appropriate frequency. Additionally, applicants bear the burden of proceeding and the burden of proof in requesting the Commission to overturn a coordinator's recommendation.

(b) For frequencies between 25 and 470 MHz: (1) A statement is required from the applicable frequency coordinator as specified in §§ 90.20(c)(2) and 90.35(b) recommending the most appropriate frequency. In addition, if the interference contour of a proposed station would overlap the service contour of a station on a frequency formerly shared prior to radio service consolidation by licensees in the Manufacturers Radio Service, the Forest Products Radio Service, the Power Radio Service, the Petroleum Radio Service, the Motor Carrier Radio Service, the Railroad Radio Service or the Automobile Emergency Radio Service, the written concurrence of the coordinator for the industry-specific service, or the written concurrence of the licensee itself, must be obtained. Requests for concurrence must be responded to within 20 days of receipt of the request. The written request for concurrence shall advise the receiving party of the maximum 20 day response period. The coordinator's recommendation may include comments on technical factors such as power, antenna height and gain, terrain and other factors which may serve to minimize potential interference. In addition:

(2) On frequencies designated for coordination or concurrence by a specific frequency coordinator as specified in §§ 90.20(c)(3) and 90.35(b), the applicable frequency coordinator shall provide a written supporting statement in instances in which coordination or concurrence is denied. The supporting statement shall contain sufficient detail to permit discernment of the technical basis for the denial of concurrence. Concurrence may be denied only when a grant of the underlying application would have a demonstrable, material, adverse effect on safety.

(3) In instances in which a frequency coordinator determines that an applicant's requested frequency or the most appropriate frequency is one designated for coordination or concurrence by a specific frequency coordinator as specified in §§ 90.20(c)(3) or 90.35(b), that frequency coordinator may forward the application directly to the appropriate frequency coordinator. A frequency coordinator may only forward an application as specified above if consent is received from the applicant.

(c) For frequencies above 800 MHz: When frequencies are shared by more than one service, concurrence must be obtained from the other applicable certified coordinators.

(d) For frequencies in the 450-470 MHz band: When used for secondary fixed operations, frequencies shall be assigned and coordinated pursuant to § 90.261.

(e) For frequencies between 470 and 512 MHz, 764-776/794-806 MHz, 806-824/851-869 MHz, and 896-901/935-940 MHz: A recommendation of the specific frequencies that are available for assignment in accordance with the loading standards and mileage separations applicable to the specific radio service, frequency pool, or category of user involved is required from an applicable frequency coordinator.

(f) For frequencies in the 929-930 MHz band listed in paragraph (b) of § 90.494: A statement is required from the coordinator recommending the most appropriate frequency.

(g) For frequencies between 1427-1432 MHz: A statement is required from the coordinator recommending the most appropriate frequency, operating power and area of operation in accordance with the requirements of § 90.259(b).

(h) Any recommendation submitted in accordance with paragraphs (a), (c), (d), or (e) of this section is advisory in character and is not an assurance that the Commission will grant a license for operation on that frequency. Therefore, applicants are strongly advised not to purchase radio equipment operating on specific frequencies until a valid authorization has been obtained from the Commission.

(i) Applications for facilities near the Canadian border north of line A or east of line C in Alaska may require coordination with the Canadian government. See § 1.955 of this chapter.

(j) The following applications need not be accompanied by evidence of frequency coordination:

(1) Applications for frequencies below 25 MHz.

(2) Applications for a Federal Government frequency.

(3) Applications for frequencies in the 72-76 MHz band except for mobile frequencies subject to § 90.35(c)(77).

(4) Applications for a frequency to be used for developmental purposes.

(5) Applications in the Industrial/Business Pool requesting a frequency designated for itinerant operations, and applications requesting operation on 154.570 MHz, 154.600 MHz, 151.820 MHz, 151.880 MHz, and 151.940 MHz.

(6) Applications in the Radiolocation Service.

(7) [Reserved]

(8) Applications for frequencies listed in the SMR tables contained in §§ 90.617 and 90.619.

(9) Applications indicating license assignments such as change in ownership, control or corporate structure if there is no change in technical parameters.

(10) Applications for mobile stations operating in the 470-512 MHz band, 764-776/794-806 MHz band, or above 800 MHz if the frequency pair is assigned to a single system on an exclusive basis in the proposed area of operation.

(11) Applications for add-on base stations in multiple licensed systems operating in the 470-512 MHz, 764-776/794-806 MHz band, or above 800 MHz if the frequency pair is assigned to a single system on an exclusive basis.

(12) Applications for control stations operating below 470 MHz, 764-776/794-806 MHz, or above 800 MHz and meeting the requirements of § 90.119(b).

(13) Applications for itinerant operation in the 217-220 MHz band.

(14) Except for applications for the frequencies set forth in §§ 90.719(c) and 90.720, applications for frequencies in the 220-222 MHz band.

(15) Applications for a state license under § 90.529.

(16) Applications for narrowband low power channels listed for itinerant use in § 90.531(b)(4)

47. Section 90.176 is amended as follows:

§ 90.176 Coordinator notification requirements on frequencies below 512 MHz, at 764-776/794-806 MHz, or at 1427-1432 MHz .

(a) *Frequencies below 470 MHz.* Within one business day of making a frequency recommendation, each frequency coordinator must notify and provide the information indicated in

paragraph (g) of this section to all other frequency coordinators who are also certified to coordinate that frequency.

(1) The applicable frequency coordinator for each frequency is specified in the coordinator column of the frequency tables of §§ 90.20(c)(3) and 90.35(b)(3).

(2) For frequencies that do not specify any frequency coordinator, all certified in-pool coordinators must be notified.

(3) For frequencies that are shared between the Public Safety Pool and the Industrial/Business Pool (frequencies subject to §§ 90.20(d)(7), (d)(25), (d)(34), or (d)(46) in the Public Safety Pool, and subject to §§ 90.35(c)(13), (c)(25), or (d)(4) in the Industrial/Business Pool), all certified coordinators of both pools must be notified.

(b) *Frequencies in the 470-512 MHz band.* Within one business day of making a frequency recommendation, each frequency coordinator must notify and provide the information indicated in paragraph (g) of this section to all other certified frequency coordinators in the Public Safety Pool and the Industrial/Business Pool.

(c) *Frequencies in the 764-776/794-806 MHz band.* Within one business day of making a frequency recommendation, each frequency coordinator must notify and provide the information indicated in paragraph (g) of this section to all other certified frequency coordinators in the Public Safety Pool.

(d) *Frequencies in the 1427-1432 MHz band.* Within one business day of making a frequency recommendation, each frequency coordinator must notify and provide the information indicated in paragraph (g) of this section to the WMTS frequency coordinator designated in § 95.113 and to all other frequency coordinators who are also certified to coordinate that frequency.

(e) Each frequency coordinator must also notify all other certified in-pool coordinators on any day that the frequency coordinator does not make any frequency recommendations.

(f) Notification must be made to all coordinators at approximately the same time and can be made using any method that ensures compliance with the one business day requirement.

(g) At a minimum the following information must be included in each notification:

(1) Name of applicant;

(2) Frequency or frequencies recommended;

(3) Antenna locations and heights;

(4) Effective radiated power (ERP);

(5) Type(s) of emissions;

(6) Description of the service area; and

(7) Date and time of recommendation.

(h) Upon request, each coordinator must provide any additional information requested from another certified coordinator regarding a pending recommendation that it has processed but has not yet been granted by the Commission.

(i) It is the responsibility of each coordinator to insure that its frequency recommendations do not conflict with the frequency recommendations of any other frequency coordinator. Should a conflict arise, the affected coordinators are jointly responsible for taking action to resolve the conflict, up to and including notifying the Commission that an application may have to be returned.

48. Section 90.203(a) is amended as follows:

§ 90.203 Certification required.

(a) ***

(1) Effective October 16, 2002, except in the 1427-1432 MHz band, an equipment approval may no longer be obtained for in-hospital medical telemetry equipment operating under the provisions of this part. The requirements for obtaining an approval for medical telemetry equipment after this date are found in subpart H of part 95 of this chapter.

* * * * *

49. Section 90.205 is amended by redesignating paragraphs (f) through (k) as paragraphs (g) through (l), redesignating paragraphs (l) through (o) as paragraphs (n) through (q), and adding new paragraphs (e) and (m) to read as follows:

§ 90.205 Power and antenna height limits.

* * * * *

(e) *217-220 MHz.* Limitations on power and antenna heights are specified in § 90.259.

* * * * *

(m) *1427-1429.5 MHz and 1429.5-1432 MHz.* Limitations on power are specified in § 90.259.

* * * * *

50. Section 90.209 is amended to read as follows:

§ 90.209 Bandwidth limitations.

* * * * *

(b) * * *

(5) * * *

STANDARD CHANNEL SPACING/BANDWIDTH

Frequency band (MHz)	Channel spacing (kHz)	Authorized bandwidth (kHz)
*****	*****	*****
216-220[5]	6.25	6.25

*****	*****	*****
1427-1432[5]	12.5	12.5
*****	*****	*****

* * *

[5] Licensees will be allowed to combine contiguous channels up to 50 kHz, and more than 50 kHz only upon a showing of adequate justification per §90.259(a)(8) and (b)(10).

51. Section 90.213 is amended to read as follows:

§ 90.213 Frequency stability.

(a) * * *

MINIMUM FREQUENCY STABILITY
[Parts per million (ppm)]

Frequency range (MHz)	Fixed and base stations	Mobile stations	
		Over 2 watts output power	2 watts or less output power
*****	*****	*****	*****
216-220	1.0	.....	1.0
*****	*****	*****	*****

* * * * *

52. Section 90.259 is amended to read as follows:

§ 90.259 Assignment and use of frequencies in the bands 216-220 MHz and 1427-1432 MHz.

(a) 216-220 MHz band.

(1) Frequencies in the 216-220 MHz band may be assigned to applicants that establish eligibility in the Industrial/Business Pool.

(2) All operation is secondary to the fixed and mobile services, including the Low Power Radio Service.

(3) In the 216-217 MHz band, no new assignments will be made after January 1, 2002.

(4) In the 217-220 MHz band, the maximum transmitter output power is 2 watts. The maximum antenna height above average terrain (HAAT) is 152 m (500 feet).

(5) In the 217-220 MHz band, base, mobile, and operational fixed is permitted.

(6) Wide area operations will not be authorized. The area of normal day-to-day operations will be described in the application in terms of maximum distance from a geographical center (latitude and longitude).

(7) Assignable frequencies occur in increments of 6.25 kHz from 217.0625 MHz to 219.99375 MHz.

(8) Licensees may combine contiguous channels up to 50 kHz, and more than 50 kHz only upon a showing of adequate justification.

(b) 1427-1432 MHz band.

(1) Frequencies in the 1427-1432 MHz band may be assigned to applicants that establish eligibility in the Public Safety Pool or the Industrial/Business Pool.

(2) All operations in the 1427-1429.5 MHz band are secondary to the Wireless Medical Telemetry Service except in the locations specified in paragraph (b)(4) of this section. At the locations specified in paragraph (b)(4) of this section, all operations are secondary to the Wireless Medical Telemetry Service in the 1429-1431.5 MHz band.

(3) All operations in the 1429.5-1432 MHz band are primary in status except in the locations specified in paragraph (b)(4) of this section. At the locations specified in paragraph (b)(4) of this section, all operations are primary in status in the 1427-1429 MHz and 1431.5-1432 MHz bands.

(4) Locations:

(i) Pittsburgh, Pennsylvania – Westmoreland, Washington, Beaver, Allegheny and Butler Counties;

(ii) Washington, DC metropolitan area – Montgomery, Prince William, Fairfax, Prince George's and Charles Counties, Alexandria City, District of Columbia;

(iii) Richmond/Norfolk, Virginia – Goochland, Powhatan, Hanover, Henrico Counties, Richmond City, Hampton City, Virginia Beach City, Chesapeake City, Portsmouth City and Suffolk City;

(iv) Austin/Georgetown, Texas – Williamson and Travis Counties;

(v) Battle Creek, Michigan – Calhoun County;

(vi) Detroit, Michigan – Oakland County;

(vii) Spokane, Washington – Spokane County.

(5) All operations in the 1429.5-1432 MHz band authorized prior to April 12, 2002 are on a secondary basis.

(6) For secondary operations only fixed stations are permitted. At the locations specified in (b)(4) of this section, secondary operations are performed in the 1429-1431.5 MHz band. For all other locations, secondary operations are performed in the 1427-1429.5 MHz band. The maximum power is 1 watt EIRP.

(7) For primary operations base, mobile, operational fixed and temporary fixed operations are permitted.

(i) At the locations specified in (b)(4) of this section, primary operations are performed in the 1427-1429 MHz and 1431.5-1432 MHz bands. The maximum EIRP limitations are as follows:

Operation	Frequency range (MHz)			
	1427-1428 MHz	1428-1428.5	1428.5-1429	1431.5-1432
Fixed	100 watts	10 watts	1 watt	1 watt
Mobile	1 watt	1 watt	25 milliwatts	25 milliwatts
Temporary fixed	1 watt	1 watt	1 watt	1 watt

(ii) For all other locations, primary operations are performed in the 1429.5-1432 MHz band. The maximum EIRP limitations are as follows:

Operation	Frequency range (MHz)			
	1429.5-1430	1430-1430.5	1430.5-1431.5	1431.5-1432
Fixed	1 watt	1 watt	10 watts	100 watts
Mobile	25 milliwatts	1 watt	1 watt	1 watt
Temporary fixed	1 watt	1 watt	1 watt	1 watt

(8) Wide area operations will not be authorized. The area of normal day-to-day operations will be described in the application in terms of maximum distance from a geographical center (latitude and longitude).

(9) Assignable frequencies occur in increments of 12.5 kHz from 1427.0125 MHz to 1431.9875 MHz.

(10) Licensees, however, may combine contiguous channels up to 50 kHz, and more than 50 kHz only upon a showing of adequate justification.

(11) For any operation in the 1427-1429.5 MHz band, the predicted or measured field strength – in the WMTS primary band – at the location of any registered WMTS healthcare facility shall not exceed 150 uV/m. For the locations specified in (b)(4) of this section, WMTS is primary in the 1429-1431.5 MHz band. For all other locations, WMTS is primary in the 1427-1429.5 MHz band.

(c) Authorized uses.

(1) Use of these bands is limited to telemetering purposes.

(2) Base stations authorized in these bands shall be used to perform telecommand functions with associated mobile telemetering stations. Base stations may also command actions by the vehicle itself, but will not be authorized solely to perform this function.

(3) Airborne use is prohibited.

53. Part 95 of title 47 of the Code of Federal Regulations, is amended to read as follows:

PART 95 – PERSONAL RADIO SERVICES

The authority citation for Part 95 continues to read as follows:

AUTHORITY: Sections 4, 303, 48 Stat. 1066, 1082 as amended; 47 U.S.C. 154, 303.

54. Section 95.630 is amended to read as follows:

§ 95.630 WMTS Transmitter frequencies.

***

1427-1432 MHz

55. Section 95.1113 is amended to read as follows:

§ 95.1113 Frequency coordinator.

(b) * * *

(5) Notify licensees – who are operating in accordance with § 90.259(b) – of the need to comply with the field strength limit of § 90.259(b)(11) prior to initial activation of WMTS equipment in the 1427-1432 MHz band.

(6) Notify licensees – who are operating in 1392-1395 MHz band in accordance with Subpart I of Part 27 – of the need to comply with the field strength limit of § 27.804 prior to initial activation of WMTS equipment in the 1395-1400 MHz band.

SEPARATE STATEMENT OF COMMISSIONER KATHLEEN Q. ABERNATHY

Re: Amendments to Parts 1, 2, 27 and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz Government Transfer Bands, WT Docket No. 02-08, Report and Order.

Today's Order is a substantial and important step forward in providing additional spectrum for some essential wireless services that often receive less attention that the traditional CMRS industry. As we develop new and innovative spectrum management policies, we must remember that one size does not fit all. In fact, it is imperative that we adopt a diverse and flexible spectrum management approach that allows a wide variety of services to survive, thrive and serve the American people.

The Commission today does just that. We license some bands site-by-site, others nationwide, and still others in 52 areas. The Commission licensed paired bands and unpaired as well. Some licenses are 5 MHz, others only 2 MHz. The agency also designed some bands to provide additional spectrum resources for private land mobile radio services. These service rules are significant because many of these licensees have unique safety and reliability needs that cannot be met by traditional commercial services. Similarly we chose to auction two five MHz bands as unpaired spectrum blocks to allow new technologies that do not use paired spectrum to enter the marketplace. These various approaches enable a wide variety of licensees to provide spectrum-based services.

As we work to facilitate a more effective secondary market, our initial allocations matter more than they should from a policy perspective. For today, we must adopt policies that reflect the way things are. Thus today, we will need to consider all shapes and sizes of spectrum allocations and service rules to serve the public interest.

I also want to emphasize the importance of the more-detailed-than-usual interference protections advanced by the parties and adopted today in the 1427-1432 MHz band. As I said when we issued the Notice of Proposed Rulemaking in this docket, "[t]he medical and utility telemetry communities privately crafted a solution that advances each of their interests – a job often better done by the parties than by government. There is no question that mutual resolution of their private interests greatly assists the Commission in assessing the broader public interest." The record in this docket did not produce a single party that opposed the interference limits jointly advanced by the medical and utility telemetry communities. While I generally support flexibility in allocations and service rules, I cannot support flexibility in the face of the identified public interest harms associated with that approach for these bands. Wireless Medical Telemetry Service devices are used in hospitals, clinics, nursing homes, and other health care facilities to transmit waveform and other physiological data from patient measurement devices (that are worn or carried by the patient or transported along with the patient) to patient monitoring, data distribution and data storage systems. One of the main purposes of patient monitoring is the early detection of life-threatening developments so that appropriate and timely intervention can be rendered. Based on the supportive record, safety-of-life considerations and the lack of any countervailing commercial interest, I believe the detailed rules we adopt today to protect medical telemetry from harmful interference advances the public interest.

Finally I am pleased that the Commission has committed to issuing an NOI by year's end to examine the availability of wireless services in rural America. The decision-making process would greatly benefit from additional data regarding the spectrum being used, the services being provided, and the needs in these areas. In turn, the Commission has an obligation to ensure that our regulatory tools are effective in facilitating the efficient use of spectrum in rural regions. Thus, secondary markets, partitioning and disaggregation, auction service areas, bidding credits, and our other policies should be

closely reviewed to ensure their efficacy for non-urban settings. This is particularly important because wireless is poised to provide significant competition in rural areas where multiple facilities-based providers have not developed as rapidly in some more densely populated areas. I look forward to this proceeding and gathering a record that will improve our rural spectrum policy process.

SEPARATE STATEMENT OF
COMMISSIONER MICHAEL J. COPPS
Approving in part, dissenting in part

RE: In the Matter of Amendments to Parts 1, 2, 27, and 90 of the Commission's Rules to License Services in the 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz and 2385-2390 MHz Government Transfer Bands (Report and Order).

In an era of scarce spectrum, with all the new technologies and services out there clamoring for additional spectrum, making 27 additional megahertz available for commercial use is good news indeed. And we are continuing the process set in motion by Congress to fully transfer this spectrum from government use to commercial use. I support this process, and I support and the vast majority of the rules that we adopt today.

I have deep misgivings, however, about one aspect of today's Order, the significant extension of our transfer of FCC allocation responsibilities to "band managers."

A "band manager" is a private entity to which the FCC grants spectrum rights to act as a "spectrum broker" rather than as a service provider. Band managers need not provide communications services; they may sell the use of their spectrum to whoever is willing to pay for it. This enables the band manager to gain private profits by brokering public spectrum. The Commission has permitted band managers in limited circumstances in the past for narrow guard bands. To date, we have not adequately analyzed the success of this initiative. In fact, the first annual band manager report is still in preparation. Nevertheless, today's Order represents a significant expansion of the FCC's use of band managers. I recognize the potential theoretical benefits of band managers. They can arguably allocate spectrum more quickly and dynamically than can an overburdened Commission, and the profit motive gives them an incentive to squeeze the most out of the spectrum as possible. But I also see grave risks.

The spectrum is a public asset. The Commission's stewardship of the spectrum is a public trust. Congress gave the Commission the responsibility to allocate spectrum for a reason. While there are often downsides to government management when it comes to speed and innovation, there are sometimes very important advantages. This Commission is legally obligated to operate transparently. Our charter commands us to promote the public interest. And we are accountable to the American people. Our charter is different than a band manager's. A band manager need not reveal its decisions to the public. It is legally obligated to maximize profits for its shareholders rather than serve primarily the public interest. Band managers are accountable to those private interests that control them, not to the people. Probably most band managers would recognize their larger responsibilities and it is not the majority I am worried about; it is the few who may come along and see this as an opportunity to put their private gain ahead of the public interest.

Congress understands the costs and benefits of government versus private stewardship of various assets. Here, I believe, Congress chose the FCC to manage spectrum because the protections inherent in FCC allocation of spectrum outweigh the costs.

Beyond these questions of the general propriety of band management, I also note that practical questions about band management remain unresolved. While we have allowed band managers recently in guard bands, we do not have much experience in their operation. What will happen if a band manager's lessee violates our rules? Will we be able in practice to successfully to enforce our rules against the lessee and the band manager when they start pointing fingers at each other? What will happen if band managers faced with economic distress break our rules to increase profits in a way that helps them in the short term but throws the band into confusion in the long run? Even if we are able to enforce, how will we clean up the mess? What will happen if band managers artificially limit spectrum supply to drive up prices for their own profit? Recent experience in electricity trading should indicate that such destructive tactics are altogether plausible. Our previously established band manager rules attempt to address some of these concerns, but they remain largely untested.

I do not believe that Congress wanted the FCC to delegate its spectrum authority to private speculators who can turn public spectrum into private profits with no intention of providing communications services. I believe that significant questions about the enforcement of our rules and the effect of band managers on the public interest are too uncertain to support an extension of our reliance on band managers at this time. I therefore must dissent from this section of the Order.

I understand resource constraints and all the other arguments used to justify the conferring onto others of the authority reposed in us. In my mind, none of these arguments even begins to offset the Commission's obligation to perform its duties itself as the agent of the American public to manage the American public's spectrum.

On a separate matter, I also believe that the Commission has far too little information to rely on partitioning and disaggregation as fulfilling our statutory responsibility to promote service to rural areas. Section 309(j)(3) states that the Commission must design competitive bidding systems so as to promote objectives including "promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by minority groups and women."[676]

One theory is that partitioning and disaggregation will accommodate the entry of new entrants and small businesses, and will speed service to unserved or underserved areas, enhance competition, and encourage new entrants into the market. Relying on this theory, the Commission could decide that it can auction spectrum in nationwide blocks or large EAGs, rather than in small geographic blocks geared toward rural service, depending on partitioning and disaggregation to eventually provide spectrum to rural areas. To make such a decision we would have to believe that a nationwide carrier will buy a nationwide license and if it finds that it will not use the rural portion of its spectrum, as is often the case when a national carrier buys such a license, it will strike deals with local carriers using the partitioning and disaggregation rules.

However, rural telecom commenters state emphatically that partitioning and disaggregation do not result in significant new service to rural areas. These rural carriers explain that the cost to a national

[676] 47 U.S.C. § 309(j)(3).

carrier of negotiating and signing a partitioning or disaggregation deal with a small carrier is often higher than the profit the nationwide carrier would gain from the deal. Therefore, they find it better business to let the rural spectrum lie fallow, even if rural carriers are interested in using it.

I believe that section 309(j)(3) compels us to design our auctions to promote service to rural areas. While partitioning and disaggregation theoretically could accomplish this goal, there is no proof that they do so. Therefore, we should not rely on these tools to meet our statutory obligation until we gather far more information.

I support the use of partitioning and disaggregation here only because we do not rely on these tools as fulfilling our statutory duty to rural America, and because we promise to release a formal Notice of Inquiry into tools at our disposal to promote rural service through our auction rules, by the end of the year. This NOI will explore whether partitioning and disaggregation are useful for this goal, whether there are ways to improve partitioning and disaggregation, whether there are additional and better tools that we should adopt in addition to auctioning smaller service areas. I believe that this NOI will give us the information we need to determine how to meet our responsibilities. I note, however, that until this NOI provides me with new information, I will continue to push for RSAs to promote rural service, and will not rely on partitioning and disaggregation for this purpose.